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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/978,054	10/17/2001	Yasunori Shingaki	027260-498	3205

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Platon N. Mandros
BURNS, DOANE, SWECKER & MATHIS, L.L.P.
P.O. BOX 1404
Alexandria, VA 22313-1404

EXAMINER

WILLIAMS, LAWRENCE B

ART UNIT	PAPER NUMBER
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2638

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/978,054

Applicant(s)

SHINGAKI, YASUNORI

Examiner

Lawrence B Williams

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on amendment filed on 12 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12 April 2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Remarks, filed 12 April 2005, with respect to the rejection(s) of claim(s) 1-4 under 35 USC 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Ito (US 5,623,522) and Davis et al. (US 5,263,054).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito (US Patent 5,623,522) in view of Davis et al. (US Patent 5,263,054) and further in view of Asano et al. (US Patent 5,636,343).

(1) With regard to claim 1, Ito discloses in Fig. 1 a serial-data- communication apparatus for transmitting and receiving serial data composed of a plurality of bits including a start bit at a head (abstract), comprising: edge-detection means for detecting (8) a trailing edge of received data (col. 3, lines 13-15); start-bit-level-inspection means (col. 13, lines 10-20) for recognizing the reception of the start bit of said received data based upon the detection of said trailing edge

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provided by said edge-detection means and start-bit-detection-error-notification means (10) which outputs a signal to a circuit said signal indicating occurrence of an error in detecting the start bit when any change in the bit level of the start bit is detected by said start-bit-level-inspection means (col. 13, lines 10-21). Ito does not however disclose monitoring a bit level of the start bit to examine whether the start bit maintains a predetermined bit level. However, Davis et al. discloses monitoring a bit level of the start bit to examine whether the start bit maintains a predetermined bit level (col. 4, lines 58-60).

It would have been obvious to one skilled in the art at the time of invention to incorporate the teaching of Davis with those of Ito as a method for improved data communications (col. 1, line 60- col. 2, line 3).

Ito nor Davis et al disclose outputting the error detection signal to an external circuit. However, Asano et al. discloses in Fig. 6, outputting an error detection signal to an external circuit (col. 5, lines 14-26).

Therefore it would be obvious to one of ordinary skill in the art at the time of invention to add the addition of the invention of Asano et al. to the invention of Ito in combination with Davis et al. as a method of detecting discordance between devices without comparing signals by software (col. 5, lines 14-26).

(2) With regard to claim 2, Asano et al. also discloses wherein an error-notification means (1, 2) outputs a signal controlling the transmission and reception of the serial data, as an interrupt request signal (col. 5, lines 14-19).

(3) With regard to claim 3, claim 3 inherits all limitations of claim 1 above, as claim 3 only teaches the method of the apparatus disclosed in claim 1.

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(4) With regard to claim 4, claim 4 inherits all limitations of claims 2 and 3 above.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a.) Maeda et al. discloses in US Patent 5,790,603 Communication apparatus With Collision Detection And Edge Detection For Transmitting And Receiving Data.

b.) Shin discloses in US Patent 6,381,287 B1 a Data Slicer.

c.) Fujitaka discloses in US Patent 5,861,925 Multiplexed Text Data Sampling Circuit.

d.) Yagi et al. discloses in US Patent 5,506,626 Closed-Captioned Decoder Circuit Having robust Synchronization Features.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence B Williams whose telephone number is 571-272-3037. The examiner can normally be reached on Monday-Friday (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on 571-272-3078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

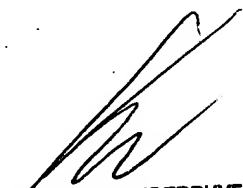
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lawrence B. Williams

lbw

June 23, 2005



KENNETH VANDERPUYE
PRIMARY EXAMINER